## Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of	)	
Unlicensed Operation in the TV Broadcast	)	ET Docket No. 04-186
Bands	)	
	)	ET Docket No. 02-380
Additional Spectrum for Unlicensed Devices	)	
Below 900 MHz and in the 3 GHz Band	)	

## Via the ECFS

## INTRODUCTION

As part of my work as a wireless system architect for Cadence Design Systems, Inc. ("Cadence"), I have been involved in promoting and supporting discussion of unlicensed operation in the TV bands within the broader wireless technology community, focused especially on the application of cognitive radio techniques, beginning with the release by the Commission of the document "Notice of Inquiry: Additional Spectrum for Unlicensed Devices Below 900 MHz and in the 3 GHz Band", ET Docket No. 02-380, December 11, 2002. I wrote a paper for and made a presentation to the Communication Design Conference, held in San Jose, CA, in September, 2003, entitled "Radio Architectures for Unlicensed Reuse of Broadcast TV Channels". In addition, I have made presentations to the Berkeley Wireless Center ("BWRC"), University of California, Berkeley, including the presentation "Cognitive Radio Emerges from Obscurity" in January, 2004, and a presentation in June, 2004, "Cognitive Radio in the UHF TV Bands" reviewing the then newly is sued instant NPRM. I have also been heavily involved with the BWRC as an advisor regarding their cognitive radio research efforts as part of my liaison role to the BWRC from Cadence, which is a supporting member company.

Submission page 1 John Notor

The comments which follow represent my own personal views, not those of my employer, Cadence, or those of the BWRC. In the interests of full disclosure, I am a voting member of the IEEE 802.18 Radio Regulatory Technical Advisory Group ("IEEE 802.18"), and voted in favor of the motion to ext end the comment and reply comment deadlines. Nonetheless, I believe it is important to speak independently on this issue to offer a broader perspective.

## I SUPPORT THE IEEE 802.18 RADIO MOTION FOR EXTENSION OF TIME FOR COMMENTS AND REPLY COMMENTS TO THE INSTANT NPRM

In issuing the initial NOI, ET 02-380, and the instant NPRM, the Commission, has taken historic steps in revising the regulatory framework for TV band operations, and, in the process, created a watershed opportunity for the development and application of innovative radio technology, including cognitive radio techniques, to the complex problem of sharing spectrum between licensed and license exempt services.

As an advocate of cognitive radio technologies as a means to enable such sharing, I believe that this unique opportunity should be given additional time beyond the dates currently set to allow interested parties to fully explore technology alternatives and offer carefully considered comments to the Commission. Speaking for myself, although considerable progress has been made in analysis supporting spectrum sensing and other cognitive radio approaches to operations in the TV band, work is still in process and needs more time to be completed. I believe cognitive radio techniques offer the kind of ground breaking application of technology that will fuel innovation and economic opportunities in the next phase of the evolution of licensed exempt services, extending the benefits that have come to pass since the Commission's initial creation of licensed exempt operations under Part 15.247 and Part 15.249 of the rules.

The extension of time proposed by IEEE 802.18 will, in my opinion, allow sufficient time to complete the work in process and offer the Commission the best available information

Submission page 2 John Notor

from all parties to support the Commission in developing the final rulemaking. I fully support IEEE 802.18's motion requesting the extension of time.

Respectfully submitted,

/s/

John Notor System Architect Cadence Design Systems, Inc. 2655 Seely Avenue MS 8A1 San Jose, CA 95134 Tel: 408.473.8373 Mobile: 408.799.2738

Email: jnotor@cadence.com

Submission

John Notor